

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 4

IN THE MATTER OF:

Terry Creek Dredge Spoil
Areas/Hercules Outfall Site,
Brunswick, Glynn County,
Georgia,

Hercules Incorporated,

Respondent.

ADMINISTRATIVE ORDER ON
CONSENT FOR REMOVAL ACTION

U.S. EPA Region 4
CERCLA Docket No. 98-04-C

Proceeding Under Sections 104,
106(a), 107 and 122 of the
Comprehensive Environmental
Response, Compensation, and
Liability Act, as amended, 42
U.S.C. §§ 9604, 9606(a), 9607
and 9622

I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order on Consent for Removal Action ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Hercules Incorporated (hereinafter "Hercules" or "Respondent"). This Order provides for the performance of the removal action by Respondent and the reimbursement of response costs incurred by the United States in connection with the property located at or near the Hercules, Incorporated, facility in Brunswick, Glynn County, Georgia and the confluence of Dupree Creek and Terry Creek (the "Terry Creek Dredge Spoil Areas/Hercules Outfall Site" or the "Site"). This Order requires Respondent to conduct the removal action described herein to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

This Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622, as amended ("CERCLA"), and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D and to the Chief, Emergency Response and Removal Branch, Waste Management Division by EPA Region 4 Delegations. EPA has notified

the State of Georgia of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

Respondent's participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order except in a proceeding to enforce the terms of this Order. Respondent agrees to comply with and be bound by the terms of this Order. Respondent further agrees that it will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

This Order applies to and is binding upon EPA, and upon Respondent and Respondent's successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Order. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Order and comply with this Order. Respondent shall be responsible for any noncompliance with this Order.

III FINDINGS OF FACT

For the purposes of this Order, EPA finds that:

The Site is located near the confluence of Terry Creek, Dupree Creek, and the Back River in the City of Brunswick in Glynn County, Georgia. The Site includes three areas where soils and sediments dredged from the bottom of Terry and Dupree Creek were disposed (the "dredge spoils areas" or "dredge disposal areas"), plus the outfall ditch that acts as the terminus of a culvert running beneath U.S. Highway 17 from the nearby Hercules chemical manufacturing plant (the "Hercules outfall").

Hercules produced toxaphene, a chlorinated camphene pesticide, at its Brunswick facility from 1948 until it ceased its manufacture in December 1980. The U.S. Army Corps of Engineers ("the Corps"), under the rubric of the Terry Creek Project, initially undertook the dredging of Terry Creek in accordance with the Rivers and Harbors Act of 1938. The Terry Creek Project was completed in 1939, but the Corps performed follow-up dredging activities in 1940, 1941, 1942, and 1946. Thereafter, work under the Terry Creek Project paused until the Corps again began dredging activities in 1971; further dredging followed in 1972, 1978, 1983, 1987 and 1988/89. For the work prior to 1972, the Corps sometimes used an area known as "Tract 1", located adjacent to the Torras Causeway beside Terry Creek, as a disposal area for dredged material. However, following some controversy in 1971 concerning whether Tract 1 was then an appropriate location for the disposal of dredge material, dredged materials were placed on a seventy two

(72) acre parcel near the Terry and Dupree Creeks owned by Hercules and the Shell Trust. Hercules, the City of Brunswick, the Brunswick Harbor Port Authority, and Glynn County, Georgia assisted in the acquisition of the easements that the Corps was to maintain at this new disposal area. The Corps maintains its dredge disposal easements in perpetuity.

The Corps' records reflect anecdotal information that several hundred pounds of toxaphene per day were discharged from the Hercules outfall into Dupree Creek during the year 1966. With the completion of a treatment system in 1972, the amount of toxaphene discharged was to be reduced to no more than 1 pound per day. By 1975, this discharge became a permitted discharge not to exceed 1.1 pounds/day with a monthly average of 0.44 pounds/day.

As reported by EPA in January 1997, EPA collected soil/sediment and water samples during September 1995 from three of the dredge disposal areas in the vicinity of Terry Creek as part of an Expanded Site Investigation of the Site. This investigation found toxaphene concentrations up to 430 parts per million ("ppm") in the dredge disposal areas near the Terry and Dupree Creeks.

As part of a Community Based Environmental Project undertaken by EPA in the Brunswick area, members of EPA's Ecological Support Branch collected samples of forage fish (*Fundulus heteroclitus*) throughout the Estuarine areas surrounding the Brunswick peninsula during the Spring and Summer of 1996. Whole-body analysis of two of the samples taken from the confluence of Dupree and Terry Creek, revealed estimated levels of toxaphene at 18 ppm and 27 ppm.

During the Spring of 1997, EPA conducted an Ecological Screening Evaluation ("ESE") in the areas of Dupree and Terry Creek involving the collection of samples of sediment, water, and various species of forage and consumer fish and crabs. The ESE revealed estimated levels of toxaphene up to 230 ppm in sediments in Terry and Dupree Creeks. Prior investigations by EPA in 1996 and 1997, by the Corps in 1985, and in 1987 by the Georgia Environmental Protection Division of the Department of Natural Resources had also found toxaphene in similar concentrations in sediments in Terry Creek. Results from fish samples collected as part of the ESE revealed that organic constituents thought by EPA to be toxaphene, but which have not yet been positively identified as toxaphene, were present in forage fish up to an estimated 27 ppm and present in consumer fish at concentrations up to 3.9 ppm.

In 1994, tests of sediments taken by the U.S. National Oceanic and Atmospheric Administration from estuarine settings including the Terry Creek/Back River area indicated that sediments in Terry Creek showed significant specific sediment toxicity not shown in other areas of the Brunswick/St. Simon's estuary. Subsequent

analysis by EPA in 1997 revealed toxaphene in sediments in estimated concentrations of 1,300 ppm.

Toxaphene is generally considered to be a persistent pesticide with an average half-life in the environment of 10 years. It is a listed hazardous substance, a priority pollutant, and had its pesticide registration canceled by the EPA in 1982. EPA considers toxaphene to be a probable human carcinogen, hazardous to aquatic organisms, and potentially to accumulate in the food chain. The areas of Dupree Creek, Terry Creek, and the Back River are used by a variety of occasional sport fishermen, and commercial crabbers.

There are two basic actions contemplated by the work agreed to under this Order. The first is to remove a source of toxaphene from the Terry/Dupree Creek system located in the old outfall canal that is used by Hercules to discharge waste and storm waters emanating from its nearby industrial facility. Although the channel has been dredged in the past, this action is designed to further reduce a potential source of toxaphene to the creek system, thus reducing a threat posed by the Site. The second action contemplated by this Order is to implement a sampling plan specifically designed to identify other potential secondary source areas of toxaphene that may be present in Terry and/or Dupree Creek and thus facilitate the planning of future source removals, if needed.

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

1. The Terry Creek Dredge Spoil Areas/Hercules Outfall Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
2. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
3. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
4. Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the Site as defined by Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

6. The conditions present at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment. Factors that may be considered are set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300 ("NCP").

7. The actual or threatened release of hazardous substances at or from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

8. The removal actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP or CERCLA.

V. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondent(s) shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

1. Designation of Contractor, Project Coordinator, and On-Scene Coordinator

Respondent shall perform the removal action required by this Order itself or retain (a) contractor(s) to perform the removal action. Respondent shall notify EPA of Respondent's qualifications or the name(s) and qualification(s) of such contractor(s) within (7) days of the effective date of this Order. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the removal action under this Order at least (7) days prior to commencement of such removal action. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondent, or of Respondent's choice of itself to do the removal action. If EPA disapproves of a selected contractor or the Respondent, Respondent shall retain a different contractor or notify EPA that it will perform the removal action itself within (7) days following EPA's disapproval and shall notify EPA of that contractor's name or Respondent and qualifications within (30) days of EPA's disapproval.

Within (7) days after the effective date of this Order, Respondent shall designate a Project Coordinator who shall be responsible for administration of all the Respondent's actions required by the Order. Respondent shall submit the designated coordinator's name, address, telephone number, and qualifications to EPA. To the greatest extent possible, the Project Coordinator

shall be present on Site or readily available during Site work. EPA retains the right to disapprove of any Project Coordinator named by Respondent. If EPA disapproves of a selected Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within (7) days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondent.

EPA has designated Leo Francendese of the EPA, Region 4 Emergency Response and Removal Branch as its On-Scene Coordinator ("OSC"). Respondent shall direct all submissions required by this Order to the OSC at U.S. EPA, Atlanta Federal Center, 61 Forsyth Street S.W., Atlanta, Georgia 30303. EPA and Respondent shall have the right, subject to the immediately proceeding paragraph, to change its/their designated OSC or Project Coordinator. Respondent shall notify EPA, (7) days before such a change is made. The initial notification may be orally made but it shall be promptly followed by a written notice.

2. Work to Be Performed

Respondent shall perform, at a minimum, the following removal action:

1. Remove toxaphene-contaminated sediments from the outfall ditch and culvert as described in the document attached hereto as Appendix "A" and fully incorporated hereby into this Order, entitled "Revision 1 Workplan Sediment Removal in the Outfall Ditch and Culvert."
2. Perform all tasks contained in the sampling and analysis plans described in the document and modification-letter attached hereto as Appendix "B" and fully incorporated hereby into this Order, entitled "Revision 0 Sampling and Analysis Plan, Quality Assurance Plan, Health and Safety Plan" as modified by letter Appendices of August 20, 1997.

2.1 Work Plan and Implementation

To the extent not already accomplished, within (7) days after the effective date of this Order, Respondent shall submit to EPA for approval a draft Work Plan for performing the removal action set forth above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Order.

EPA may approve, disapprove, require revisions to, or modify the draft Work Plan. If EPA requires revisions, Respondent shall submit a revised draft Work Plan within (30) days of receipt of

EPA's notification of the required revisions. Respondent shall implement the Work Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be fully enforceable under this Order. Respondent shall notify EPA at least 48 hours prior to performing any on-Site work pursuant to the EPA-approved Work Plan. Respondent shall not commence or undertake any removal action on-Site without prior EPA approval.

2.2 Health and Safety Plan

To the extent not already accomplished, within (7) days after the effective date of this Order, the Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Order. This plan shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, and currently updated July 1988 (but see latest version if different). In addition, the plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 CFR Part 1910. Respondent shall incorporate all changes to the plan recommended by EPA, and implement the plan during the pendency of the removal action.

2.3 Quality Assurance and Sampling

All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow the following documents, as appropriate, as guidance for QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01; dated January 1990; "Compendium of ERT Procedures," OSWER Directives Numbered 9360.4-04 through 9360.4-08; and the representative Sampling Guidance for soil, air, ecology, waste, and water as this information becomes finalized and available.

Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondent shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondent while performing work under this

Order. Respondent shall notify EPA not less than (7) days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

2.4 Post-Removal Site Control

In accordance with the Work Plan schedule or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal Site control consistent with Section 300.415(k) of the NCP and OSWER Directive 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal Site control arrangements.

2.5 Reporting

Unless otherwise directed by the OSC in writing, Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Order every (10th) day after the date of receipt of EPA's approval, under this Order, of the Work Plan until termination of this Order. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

To the extent that Respondent owns any portion of the Site, it shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice that the property is subject to this Order to the transferee and written notice to EPA and the State of the proposed conveyance, including the name and address of the transferee. Respondent agrees to require that its successor comply with the immediately preceding sentence and sub-section three - Access to Property and Information, below.

2.6 Final Report

Within (60) days after completion of all removal actions required under this Order, the Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Order. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Order, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal

action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3. Access to Property and Information

To the extent not already accomplished, Respondent shall provide, and/or obtain access to the Site and off-Site areas to which access is necessary to implement this Order, and provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and State of Georgia's representatives. Such access provided and/or obtained by Respondent shall permit these individuals to move freely on-Site and at appropriate off-Site areas in order to conduct actions which EPA determines to be necessary. Respondent shall submit to EPA, upon receipt, the results of all sampling or tests and all other data generated by Respondent or their contractor(s), or on the Respondent's behalf during implementation of this Order.

Where action under this Order is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within (7) days after the effective date of this Order, or in such shorter period of time as may otherwise be specified in writing by the OSC. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. Respondent shall describe in writing its effort(s) to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorneys' fees incurred by the United States in obtaining such access.

4. Record Retention, Documentation, Availability of Information

Respondent shall preserve all documents and information relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for ten years following completion of the removal actions required by this Order. At the end of this ten year-period and 30 days before any document or information is to be destroyed, Respondent shall

notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Respondent shall provide documents and information retained under this section at any time before expiration of the ten year-period at the written request of EPA.

Respondent may assert a business confidentiality claim pursuant to 40 CFR § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Order, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by Respondent. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondent.

Respondent shall maintain a running log of privileged documents on a document-by-document basis, containing the date, author(s), addressee(s), subject, the privilege or grounds claimed (e.g., attorney work product, attorney-client), and the factual basis for assertion of the privilege. Respondent(s) shall keep the "privilege log" on file and available for inspection. EPA may at any time challenge claims of privilege."

5. Off-Site Shipments

All hazardous substances, pollutants, or contaminants removed off-Site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, pursuant to Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the Revised Off-Site Policy, (50 Fed. Reg. 49200 (September 22, 1993)). EPA will provide information on the acceptability of a facility under Section 121(d)(3) of CERCLA and the above regulation Unless impracticable, prior notification of out-of-state waste shipments shall be given consistent with OSWER Directive 9330.2-07.

6. Compliance With Other Laws

Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e) and 40 CFR Section 300.415(j). In accordance with the terms of 40 CFR Section 300.415(j), all on-Site actions required pursuant to this Order shall, as may be determined by EPA to be practicable considering the exigencies of the circumstances, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws.

(See "The Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991).

7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the actions conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify EPA's OSC and the National Response Center (telephone number (800) 424-8802) of the incident or Site conditions. If Respondent fails to respond, EPA may respond to the release or endangerment and reserves the right to pursue cost recovery.

In addition, in the event of any release of a hazardous substance from the Site, Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section 103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.

VI. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

The OSC shall be responsible for overseeing the Respondent's implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this Order, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

VII. REIMBURSEMENT OF COSTS

Respondent shall reimburse EPA for all future response costs, not inconsistent with the NCP, incurred by the United States. Future response costs are all costs arising on and after the date that the Order is signed by EPA Region 4, including, but not limited to, direct and indirect costs, that the United States has or shall incur in reviewing or developing plans, reports and other items pursuant to this Order, verifying the Work, or otherwise implementing, overseeing, or enforcing this Order.

On a periodic basis, EPA will submit to Respondent a bill for future response costs that includes a Regional cost summary. Respondent shall, within thirty (30) days of receipt of the bill, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund," to the following address:

U.S. Environmental Protection Agency
Region 4
Superfund Accounting
P.O. Box 100142
Atlanta, Georgia 30384
Attn: Collection Officer for Superfund

Respondent shall simultaneously transmit a copy of the check to Ms. Paula Batchelor; U.S. Environmental Protection Agency, Region 4; Atlanta Federal Center; Program Services Branch; Cost Recovery Section; 61 Forsyth Street, S.W.; Atlanta, GA 30303-3104. Payments shall be designated as "Response Costs-Terry Creek Dredge Spoil Areas/Hercules Outfall Site" and shall reference the payor's name and address, the EPA site identification number "049L", and the docket number of this Order.

In the event that the payments for future response costs are not made within thirty (30) days of the Respondent's receipt of the bill, Respondent shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA. The interest for Respondent's failure to make timely payments on Future Response costs shall begin to accrue on the date of the Respondent's receipt of the bill. Interest shall accrue at the rate specified through the date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section.

Respondent may dispute all or part of a bill for Future Response Costs submitted under this Order, if Respondent alleges that EPA has made a material accounting error, or if Respondent demonstrates that a cost item is inconsistent with the NCP.

If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall simultaneously transmit a copy of both checks to the OSC. Respondent shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within thirty (30) days after the dispute is resolved.

VIII. DISPUTE RESOLUTION

The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

If the Respondent objects to any EPA action taken pursuant to this Order, including billings for future response costs, the Respondent shall notify EPA in writing of its objection(s) within (21) days of receipt of notice of such action, unless the objection(s) has (have) been informally resolved.

EPA and Respondent shall within (30) days from EPA's receipt of the Respondent's written objections attempt to resolve the dispute through formal negotiations ("Negotiation Period"). The negotiation period may be extended at the sole discretion of EPA. EPA's decision regarding an extension of the Negotiation Period shall not constitute an EPA action subject to dispute resolution or a final agency action giving rise to judicial review.

Any agreement reached by the parties pursuant to this section shall be in writing, signed by both parties, and shall, upon the signature by duly authorized representatives of both parties, be incorporated into and become an enforceable element of this Order. If the parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Regional Branch-Chief level or higher will issue a written decision on the dispute to the Respondent. The decision of EPA shall be incorporated into and become an enforceable element of this Order upon Respondent's receipt of the EPA decision regarding the dispute. Respondent's obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this section.

Following resolution of the dispute, as provided by this section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this section shall constitute a final agency action giving rise to judicial review prior to a judicial action brought by the United States to enforce the decision.

IX. FORCE MAJEURE

Respondent agrees to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and

subcontractors, that delays or prevents performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

Respondent shall notify EPA orally within 24 hours after the event, and in writing within 2 days after Respondent becomes or should have become aware of event(s) which constitute a force majeure. Such notice shall: identify the event(s) causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Respondent shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall waive any claim of force majeure by the Respondent.

If EPA determines a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

X. STATUTORY PENALTIES

Violation of any provision of this Order may subject Respondent to civil penalties of up to twenty-five thousand dollars (\$25,000) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondent violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

XI. RESERVATION OF RIGHTS

Except as specifically provided in this Order, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from

seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law. Inter alia, EPA reserves the right to bring an action against Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related either to this Order or to the Site and not reimbursed by Respondent.

XII. OTHER CLAIMS

By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

Except as expressly provided in Section XIII- Covenant Not To Sue, nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondent or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a).

This Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Respondent waives any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XIII. COVENANT NOT TO SUE

Except as otherwise specifically provided in this Order, upon issuance of the EPA notice referred to in Section XVIII - Notice of Completion, EPA covenants not to sue Respondent for judicial imposition of damages or civil penalties or to take administrative action against Respondent for any failure to perform removal actions agreed to in this Order except as otherwise reserved herein.

Except as otherwise specifically provided in this Order, in consideration and upon Respondent's payment of the response costs specified in Section VII - Reimbursement of Costs of this Order, EPA covenants not to sue or to take administrative action against Respondent under Section 107(a) of CERCLA for recovery of future response costs incurred by the United States in connection with this removal action or this Order. This covenant not to sue shall take effect upon the receipt by EPA of the payments required by Section VII - Reimbursement of Costs.

These covenants not to sue are conditioned upon the complete and satisfactory performance by Respondents of its obligations under this Order. These covenants not to sue extend only to the Respondent and do not extend to any other person.

XIV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondent for matters addressed in this Order, the Parties hereto agree that the Respondent is entitled to protection from contribution actions or claims to the extent provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4). Nothing in this Order precludes the United States or the Respondent from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery, including, but not limited to, Respondent's right to seek contribution from the U.S. Army Corps of Engineers for Respondent's costs to implement this Order.

XV. INDEMNIFICATION

Respondent agrees to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Respondent, Respondent's officers, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this Order; and (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondent and any persons for performance of work on or relating to the Site, including claims on account of construction delays. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding paragraph.

XVI. INSURANCE

Prior to commencing any on-Site work under this Order, Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of one million dollars, combined single limit. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XVII. MODIFICATIONS

Modifications to any plan or schedule or Statement of Work may be made in writing by the OSC or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within (7) days; provided, however, that the effective date of the modification shall be the date of the OSC's oral direction. Any other requirements of the Order may be modified in writing by mutual agreement of the parties.

If Respondent seeks permission to deviate from any approved Work Plan or schedule or Statement of Work, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed Work Plan modification and its basis.

No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XVIII. NOTICE OF COMPLETION

When EPA determines, after EPA's review of the Final Report, that all removal actions have been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, EPA will provide notice to the Respondent and Respondent's obligation to perform the removal actions described in Section V (Order) shall terminate. If EPA determines that any removal actions have not been completed in accordance with this Order, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan or

other document if deemed appropriate by EPA in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan or other document and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan or other document shall be a violation of this Order.

XIX. SEVERABILITY

If a court issues an order that invalidates any provision of this Order or finds that Respondent has sufficient cause not to comply with one or more provisions of this Order, Respondent shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XX. EFFECTIVE DATE

This Order shall be effective upon signature by the duly authorized delegatee of the Regional Administrator, EPA Region 4.

11 11 0019

IN THE MATTER OF this ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION for the Terry Creek Dredge Spoil Areas/Hercules Outfall Site, Brunswick, Glynn County, Georgia, Hercules, Inc., Respondent.

The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to bind the party he or she represents to this document.

Agreed this 11th day of December, 1997.

Hercules Incorporated

Please type name of Respondent

Hercules Plaza
1313 N. Market Street
Wilmington, DE 19894-0001

Please type address

BY:

Kendall W. Patterson

Your Signature

Kendall W. Patterson

Please type your name

Vice President Safety, Health and Environment

Your title or position

December 11, 1997
Date

IN THE MATTER OF this ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION for the Terry Creek Dredge Spoil Areas/Hercules Outfall Site, Brunswick, Glynn County, Georgia, Hercules, Inc., Respondent.

It is so ORDERED and Agreed

this 12th day of December, 1997.

BY: Myron D. Lair

Myron D. Lair
Chief, Emergency Response and Removal Branch
Waste Management Division
Region 4
U.S. Environmental Protection Agency